

United States Of America
Department of Transportation - Federal Aviation Administration
Supplemental Type Certificate

Number **SA5839NM**

This Certificate issued to **FEDERAL EXPRESS CORPORATION**
3101 Democrat Road
Memphis, TN 38118

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 4b of the Civil Aviation Regulations.

Original Product Type Certificate Number : A3WE

Make : Boeing

Model : 727-200

Description of Type Design Change: Modification of the B727 airplane by installation of engine inlet and exhaust noise attenuation of treatment including incorporation of respaced inlet guide vanes, exhaust gas internal mixers, acoustic spacers, and either increased area tailpipes (exit diameter 30.69 - 30.64 in. with engine first and second turbine vane rework) or standard tailpipes (exit diameter 30.262 - 30.212 in.). Modifications are to be in accordance with Federal Express Hushkit Modification Drawing List, Report No. 91-051, Revision G, dated May 7, 1993, (continued on page 3).

Limitations and Conditions: The approval of this change in type design applies to those aircraft listed airplane models. This approval should not be extended to aircraft of these models that incorporate any other previously approved modifications unless it is determined that the interrelationship between this change and any of those other previously approved modification will introduce no adverse effect on the airworthiness of those aircraft. A copy of this Supplemental Type Certificate must be included in the permanent records of the modified aircraft. If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application : December 27, 1989

Date of issuance : September 15, 1992

Date reissued : December 11, 1998

Date amended : 1/7/93, 2/18/92, 6/10/93,
4/15/97, 1/5/98, 4/9/99, 8/3/99, 4/11/02



By direction of the Administrator

(Signature)

Manager, Propulsion Branch
Los Angeles Aircraft Certification Office

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

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NOTE:

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DO NOT ADD ANY DATA TO THIS PAGE.

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Description of Type Design Change (continued):

or later FAA approved revision. FAA-approved B727-200 Airplane Flight Manual Supplement, Federal Express Report No. 92-082, Revision N/C, dated September 15, 1992, or later FAA-approved revision, is required as part of the installation with the increased area tailpipe hushkit. FAA-approved B727-200 Airplane Flight Manual Supplement, Federal Express Report No. 93-008, Revision B, dated June 10, 1993, or later FAA-approved revision, is required as part of the installation with the standard tailpipe hushkit.

Limitations and Conditions (continued):

All Limitations and Conditions shown on Type Certificate Data Sheet No. A3WE, Revision 19, or later approved revisions, for the 727-200 airplanes remain applicable. The following list contains other Limitations and Conditions which apply to this Supplemental Type Certificate modification:

Noise Compliance Aircraft serial numbers modified in accordance with this STC and listed in the Basic Section of the FEDEX Airplane Flight Manual Supplement (AFMS) as requiring use of any AFMS appendix showing Part 36, Stage 3 approval, are Stage 3 compliant.

Aircraft serial numbers modified in accordance with this STC, whose serial numbers have not been listed in the Basic Section of the FEDEX AFMS and have not been previously shown to be Part 36, Stage 3 compliant, have been determined to be a "No Acoustical Change" in accordance with § 21.93(b) and remain Stage 2.

Aircraft serial numbers modified in accordance with this STC, that have been previously shown to be Part 36, Stage 3 compliant under this STC, or any other approval, must be listed in the Basic Section of the FEDEX AFMS as requiring use of an appendix showing Part 36, Stage 3 approval and may not be operated as Stage 2 aircraft.

Engines: Only Pratt and Whitney JT8D-15, -15A, -17, -17A, -17AR and -17R turbofan engines for this modification with the increased area tailpipe hushkit (-17, -17A, -17AR and -17R engines to be operated at -15 thrust levels).

Only Pratt & Whitney JT8D-9, -9A, -15, -15A, -17, -17A, -17AR and -17R turbofan engines for this modification with the standard tailpipe hushkit.

Engine Intermix: Intermix of JT8D-9, -9A, -15 and -15A turbofan engines is permitted (-15 and -15A engines to be operated at -9 thrust levels).

Intermix of JT8D-15, -15A, -17, -17A, -17AR and -17R turbofan engines is permitted in accordance with the appropriate Federal Express Flight Manual Supplement.

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Limitations and Conditions (continued):

Engine and Airplane

Limits: See Type Certificate Data Sheet A3WE and the attached Flight Manual Supplement (Federal Express Report No. 92-082 for increased area tailpipe hushkit, Federal Express Report No. 93-008 for standard tailpipe hushkit).

Flap

Limitations: See Type Certificate Data Sheet A3WE and the attached Flight Manual Supplement (Federal Express Report No. 92-082 for increased area tailpipe hushkit, Federal Express Report No. 93-008 for standard tailpipe hushkit).

Maximum

Weights: See Type Certificate Data Sheet A3WE and the attached Flight Manual Supplement (Federal Express Report No. 92-082 for increased area tailpipe hushkit, Federal Express Report No. 93-008 for standard tailpipe hushkit).

Maximum

Speed: See Type Certificate Data Sheet A3WE and the attached Flight Manual Supplement (Federal Express Report No. 92-082 for increased area tailpipe hushkit, Federal Express Report No. 93-008 for standard tailpipe hushkit).

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